

## AMENDMENTS TO THE DRAWINGS

Please amend FIG. 19 as indicated on the annotated sheet. The amendments to FIG. 19 correct typographical errors in the drawing. Applicants have also included a replacement sheet depicting how FIG. 19 should look after it has been amended. No new matter has been added.

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## REMARKS

### I. Introduction

Claims 1-89 are pending in the present application. In the April 26, 2005, Office Action (herein "Office Action"), Claims 1-89 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,341,269, to Dulaney et al. (herein "Dulaney"). The Office Action also noted that the finality of the previous office action was withdrawn pursuant to applicants' request for continued examination under 37 C.F.R. 1.114. Furthermore, the Office Action noted that applicants' previous submission was entered on April 6, 2005.

Applicants have amended the specification and drawings to correct grammatical and typographical errors. No new matter has been added.

### II. Claim Rejections

#### A. 35 U.S.C. § 102(e) Rejections

##### 1. Introduction

Claims 1-89 were rejected under 35 U.S.C. § 102(e) as being anticipated by Dulaney. The Office Action asserts that Dulaney teaches "a method for processing an available inventory item query corresponding to inventory defined by SKU information." See Office Action, p. 3. Furthermore, the Office Action asserts that Dulaney teaches "the SKU information including at least one SKU record defining a first level of detail for the inventory item, and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items." *Id.* Still Further, the Office Action asserts that Dulaney teaches determining at least one inventory item matching a set of query criteria, the inventory item corresponding to at least one SKU and SKU inventory record. *Id.* For the following reasons, applicants respectfully submit that the rejected claims of the present application are not anticipated by Dulaney.

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Specifically, Dulaney fails to teach or suggest a method and system for processing available inventory item queries and inventory action requests corresponding to inventory items defined by stock-keeping unit (SKU) information, the SKU information including at least two levels of detail. Additionally, applicants submit that the cited reference fails to teach or suggest the limitation of determining at least one inventory item matching a query criteria, the inventory item corresponding to at least one SKU and SKU inventory record. Prior to discussing more detailed reasons why applicants believe that all of the claims of the present application are allowable over the cited and applied reference, a brief description of the present invention and the reference is presented.

a. Summary of the Present Invention

The present invention is generally related to a method and system for managing inventory item queries and reservation requests for a variety of inventory items. More specifically, the present invention is related to a method and system for processing available inventory item queries and inventory action requests corresponding to inventory items defined by stock-keeping unit (SKU) information. The SKU information includes at least one SKU record defining a first, or primary, level of detail for the inventory item, and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items.

In one example of the present invention, the system includes a client computing device, a travel server, and an inventory store. The client computing device and the travel server may be connected via the Internet. If a user at the client computing device wishes to query the travel server for available inventory, such as available airline flights, the user query is transmitted from the client computing device to the travel server over the Internet. The travel server issues a query to the inventory store which returns inventory item data that matches the query criteria. At least two levels of detail are defined in the inventory item data, an SKU record and an SKU

inventory record. The travel server transmits the results of the query to the client computing device.

Thus, the present invention provides the ability to manage inventory item queries and inventory action requests for a variety of inventory items.

b. U.S. Patent No. 6,341,269 to Dulaney et al.

Dulaney is purportedly directed toward a "a system, method and article of manufacture that optimizes inventory and merchandising shelf space utilization based upon cost and lost sales." See Dulaney, abstract. Inventory optimization in Dulaney is performed "using facing optimization which is an approach to shelf inventory management that minimizes the sum of expected annual cost of lost sales and expected annual inventory holding cost." *Id.* The technique described in Dulaney may be used to evaluate the cost of a shortage or stockout, to evaluate sales variability, or may be used to calculate the average daily demand. *Id.* at Col. 3, lines 1-50. Furthermore, the technique described in Dulaney may be used to determine the optimal solution for an unconstrained space or a constrained space of a particular facility. *Id.* at Col. 2, lines 64-67.

In accordance with the teachings of Dulaney, the process of facing optimization requires data collection. *Id.* at Col. 6, lines 24-34. The data required for an analysis is collected by a user in an appropriate spreadsheet for input into a database prior to running an optimization in either a constrained or unconstrained space. *Id.* at Col. 7, lines 25-31, and Col. 9, lines 1-5. After the required data has been collected by a user, it may be imported into the database. *Id.* at Col. 9, lines 10-16. Once the data has been imported, the user may perform a constrained or unconstrained optimization. *Id.* at Col. 9, lines 48-63.

Nevertheless, Dulaney fails to teach or suggest a method for processing an available inventory item query corresponding to inventory defined by SKU information, the SKU

information including at least one SKU record defining a first level of detail for the inventory item, and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items. Additionally, Dulaney fails to teach or suggest identifying at least one inventory item by matching a set of query criteria to the inventory item's SKU record and SKU inventory record.

2. The Claims Distinguished

a. Claim 1

Claim 1 reads as follows:

1. A method implemented in a computer device for processing an available inventory item query corresponding to inventory defined by stock-keeping unit (SKU) information, the SKU information including at least one SKU record defining a first level of detail for the inventory item, and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items, the method comprising:

obtaining, by the computer device, an available inventory query, the query including a set of criteria;

determining at least one inventory item matching the query criteria, the inventory item corresponding to at least one SKU and SKU inventory record; and

transmitting data associated with the matching SKU and SKU inventory records.

As described above, Claim 1 recites a method "implemented in a computer device for processing an available inventory item query corresponding to inventory defined by stock-keeping unit (SKU) information." Furthermore, as recited in Claim 1, the SKU information includes "at least one SKU record defining a first level of detail for the inventory item, and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items." Claim 1 further recites "obtaining, by the computer device, an

available inventory query, the query including a set of criteria" and "determining at least one inventory item matching the query criteria, the inventory item corresponding to at least one SKU and SKU inventory record." Still further, Claim 1 recites "transmitting data associated with the matching SKU and SKU inventory records." Thus, the method of Claim 1 matches a set of query criteria with at least one inventory item, the at least one inventory item corresponding to at least one SKU and SKU inventory record. Further, the method of Claim 1 transmits data associated with the matching SKU and SKU inventory records.

In contrast to the present application, Dulaney is directed toward the optimization of inventory and merchandising shelf space utilization based upon cost and lost sales." See Dulaney, abstract. Included in the teachings of Dulaney is the utilization of various user interfaces for mapping the fields of incoming inventory data to fields of a database. For example, Fig. 3 of Dulaney merely shows an exemplary graphical user interface for importing SKU data from a file into a database. See Dulaney, Fig. 3, and Col. 9, lines 1-24.

Although Dulaney utilizes standard SKU tracking information, it does not utilize multi-level information for the inventory items (e.g., an SKU record and an SKU inventory record). Instead, Dulaney is directed toward inter-item comparisons for shelf-space optimization. Applicants respectfully submit that Col. 2, lines 12-44, of Dulaney is not part of the teachings of the Dulaney invention. Instead, this portion, relied upon in the Office Action, is part of the background describing an inventory optimization technique entitled "facing optimization." As described in Dulaney, "facing optimization is an approach to shelf inventory management that minimizes the sum of expected annual cost of lost sales and expected annual inventory holding cost." See Dulaney, Col. 2, lines 50-54. Facing optimization utilizes a single-level SKU to track inventory items. It in no way utilizes multi-levels (e.g., an SKU record an SKU inventory record) to describe an inventory item.

Dulaney does not teach or suggest a method for "processing an available inventory item query corresponding to inventory defined by stock-keeping unit (SKU) information, the SKU information including at least one SKU record defining a first level of detail for the inventory item, and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items" as recited in Claim 1. Because it does not teach tracking inventory items with SKU records and SKU inventory records, Dulaney could not further teach "determining at least one inventory item matching the query criteria" as also recited in the clause.

To anticipate a claim under § 102(e), the cited reference must teach each and every element recited in the claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). With regard to Claim 1, applicant respectfully submits that the cited reference, Dulaney, fails to teach at least "determining at least one inventory item matching the query criteria, the inventory item corresponding to at least one SKU and SKU inventory record" as recited in the claim. For these reasons, applicant respectfully requests a withdrawal of the § 102(e) rejection with regard to Claim 1.

b. Claims 2-25

Claims 2-25 are dependent on Claim 1. As discussed above, Dulaney fails to teach or suggest all of the limitations recited with regard to Claim 1. Accordingly, for the above-mentioned reasons, Claims 2-25 are allowable over the cited art. In addition, Claims 2-25 further add to the patentability of applicant's invention, the details of which are discussed below.

Dependent Claims 3 and 4 add to the patentability of applicant's invention "applying a supplier limitation of use to select a corresponding SKU and SKU inventory record" and "applying a consumer selection limitation of use to select a corresponding SKU and SKU inventory record" respectively. The Office Action asserts that Dulaney teaches these limitations and cites the abstract, Fig. 3, Col. 2 lines 12-44, and Col. 3 lines 1-50. See Office Action,

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pp. 3-4. As explained above, Dulaney is directed toward a shelf-space optimization method. It in no way teaches matching inventory requests based on SKU and SKU inventory records. Accordingly, it could not further teach the utilization of supplier and consumer limitations as part of the matching process. Thus, the cited reference further fails to teach, or suggest, the additional limitations recited in Claims 3 and 4.

Dependent Claim 5 adds to the patentability of applicant's invention "processing the data associated with the identified SKU and SKU inventory records prior to transmitting the data." The Office Action asserts that Dulaney teaches this limitation and cites the abstract: Fig. 3; Col. 2, lines 12-44; and Col. 3, lines 1-50. See Office Action, p. 3. As explained above, Dulaney is directed toward a shelf-space optimization method. It in no way teaches identifying inventory requests based on SKU and SKU inventory records. Accordingly, it could not further teach the processing of data associated with the identified SKU and SKU inventory records prior to transmitting the data. Thus, the cited reference further fails to teach, or suggest, the additional limitation recited in Claim 5.

For these reasons, applicants respectfully request withdrawal of the § 102(e) rejection with regard to Claims 2-25.

c. Claims 26-89

The Office Action asserts that Claims 26-89 disclose the same inventive concept as claims 1-23. See Office Action, p. 5. Thus, the Office Action asserts that Claims 26-89 are rejected as being anticipated by Dulaney under the same rationale as Claims 1-23. See Office Action, pp. 3-5. As discussed above, Dulaney fails to teach or suggest all of the limitations recited with regard to Claims 1-25. Accordingly, for the above-mentioned reasons, Claims 26-89 are allowable over the cited art. Applicants further assert the arguments below in regards to Claims 26-89.



In accordance with the teachings of Dulaney, the inventory optimization technique requires a user to collect data, typically in a spreadsheet, and import the collected data into a database. See Dulaney Col. 6, lines 24-34; Col. 7, lines 25-31; Col. 9, lines 1-5; Col. 9, lines 10-16. Once the data has been imported, the user may perform a constrained or unconstrained facing optimization. *Id.* at Col. 9, lines 48-63. As described in Dulaney, "facing optimization is an approach to shelf inventory management that minimizes the sum of expected annual cost of lost sales and expected annual inventory holding cost." *Id.* at abstract. Thus, Dulaney teaches a system, method and article of manufacture for optimizing inventory and merchandising shelf space.

Claim 26 reads as follows:

26. A method implemented by a computer device for processing an inventory action request corresponding to one or more inventory items defined by stock-keeping unit (SKU) information, the SKU information including at least one SKU record defining a primary level of detail for the inventory item, and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items, the method comprising:

obtaining, by the computer device, an inventory action request, the inventory action request including an identification of at least one specific SKU and SKU inventory record;

processing the inventory action request; and

transmitting the results of the processing of the inventory action request.

Clearly, Dulaney does not teach or suggest a method "implemented by a computer device for processing an inventory action request corresponding to one or more inventory items defined by stock-keeping unit (SKU) information, the SKU information including at least one SKU record defining a primary level of detail for the inventory item, and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items" as

recited in Claim 26. Nor does Dulaney teach Claim 26's limitation of "[o]btaining, by the computer device, an inventory action request, the inventory action request including an identification of at least one specific SKU and SKU inventory record."

Claim 44 reads as follows:

44. A computer-readable medium having computer-readable components for managing one or more inventory items comprising:

an SKU component operable to define a first level of characteristics for one or more inventory items; and

an SKU inventory component corresponding to the SKU component and operable to define a second level of characteristics for an inventory item.

Clearly, Dulaney does not teach or suggest a computer-readable medium including an SKU component operable to define a first level of characteristics for one or more inventory items as recited in Claim 44. Nor does Dulaney teach Claim 44's limitation of "an SKU inventory component corresponding to the SKU component and operable to define a second level of characteristics for an inventory item."

Claim 72 reads as follows:

72. A system for managing inventory utilizing stock-keeping unit (SKU) information, the SKU information including at least one SKU record defining a primary level of detail for the inventory item, and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items, the system comprising:

at least one client computing device operable to issue an inventory query, the query including a set of criteria; and

a travel server operable to store one or more inventory items defined by SKU and SKU inventory records;

wherein the travel server is operable to identify one or more SKU and SKU inventory records matching the inventory query criteria submitted by the client computing device.

Clearly, Dulaney does not teach or suggest "[a] system for managing inventory utilizing stock-keeping unit (SKU) information, the SKU information including at least one SKU record defining a primary level of detail for the inventory item, and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items" as recited in Claim 72. Nor does Dulaney teach Claim 72's limitation of "a travel server operable to store one or more inventory items defined by SKU and SKU inventory records."

Claim 82 reads as follows:

82. A system for managing one or more inventory items utilizing stock-keeping unit (SKU) information, the SKU information including at least one SKU record defining a primary level of detail for the inventory item and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items, the system comprising:

at least one inventory supplier operable to provide the one or more inventory items; and

a travel server operable to store the supplier inventory items as SKU and SKU inventory records;

wherein the travel server is operable to communicate with the inventory suppliers and process inventory action requests corresponding to the SKU and SKU inventory records.

Clearly, Dulaney does not teach or suggest "[a] system for managing one or more inventory items utilizing stock-keeping unit (SKU) information, the SKU information including at least one SKU record defining a primary level of detail for the inventory item and a SKU inventory record corresponding to the SKU record and defining a second level of detail for the inventory items" as recited in Claim 82. Nor does Dulaney teach Claim 82's limitation of a "travel server is operable to communicate with the inventory suppliers and process inventory action requests corresponding to the SKU and SKU inventory records."

Claims 27-43 are dependent on Claim 26, Claims 45-71 are dependent on Claim 44, Claims 73-81 are dependent on Claim 72, and Claims 83-89 are dependent on Claim 82. As discussed above, Dulaney fails to teach or suggest each of the limitations respectively recited in Claims 26, 44, 72, and 82. Accordingly, for the above-mentioned reasons, Claims 27-43, 45-71, 73-81, and 83-89 are likewise allowable over the cited art. In addition, Claims 27-43, 45-71, 73-81, and 83-89 further add to the patentability of the claims.

To anticipate a claim under § 102(e), the cited reference must teach each and every element recited in the claim. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). With regard to Claims 26-89, applicants respectfully submit that the cited reference fails to teach each and every element recited in the respective claims. For these reasons, applicant respectfully requests a withdrawal of the § 102(e) rejection with regard to Claims 26-89.

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## CONCLUSION

Based on the above-referenced arguments and amendments, applicants respectfully submit that all of the pending claims of the present application, Claims 1-89, are allowable over the cited and applied reference. Because Dulaney fails to teach or suggest a method and system for processing available inventory item queries and inventory action requests corresponding to inventory items defined by SKU information, the SKU information including at least two levels of detail, and also fails to teach or suggest determining at least one inventory item matching a query criteria, the inventory item corresponding to at least one SKU and SKU inventory record, applicants respectfully request withdrawal of the rejections of the claims and allowance of the present application.

If any questions remain, applicants request that the Examiner contact the undersigned at the telephone number listed below.

Respectfully submitted,

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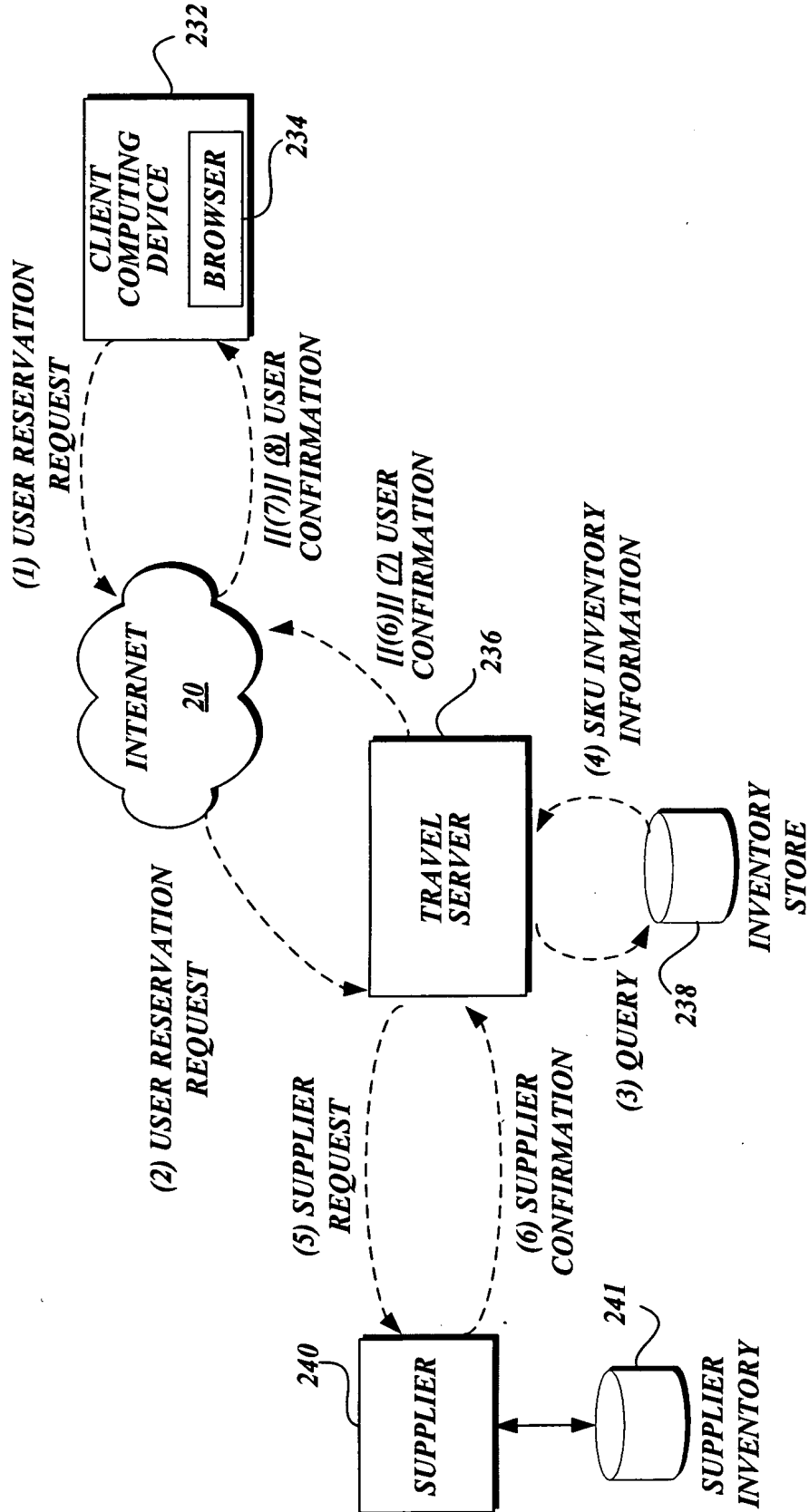


Fig. 19.